

EPA ID: ILP000509213 Site Name: ESSEX WIRE - ROCKFORD

State ID:

Alias Site Names: PRIMECAST

City: ROCKFORD

Refer to Report Dated: 7/3/2012

County or Parish: WINNEBAGO

State: IL

Report Developed By: STATE

Report Type: PRELIMINARY ASSESSMENT 001

- ☐ 1. Further Remedial Site Assessment Under CERCLA (Superfund) is not required because:
- ☒ 2. Further Assessment Needed Under CERCLA:
Higher priority for further assessment

Discussion/Rationale:

Soil and groundwater have been found to contain elevated levels of lead. IEPA recommended the site proceed to the Site Inspection (SI) stage.

Site Decision Made by: PATRICK HAMBLIN, NPL COORDINATOR

Signature: David M. Brainerd for PH

Date: 07/03/2012

**CERCLA
PRELIMINARY ASSESSMENT**

for:

**Essex Wire - Rockford
ILP 000 509 213
ROCKFORD, ILLINOIS**

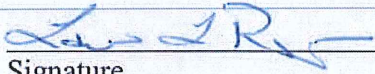
**PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
OFFICE OF SITE EVALUATION**

February 25, 2011

SIGNATURE PAGE

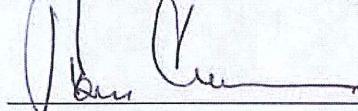
Title: CERCLA Preliminary Assessment for Essex Group (Rockford Ordinance Plant)

Preparer: Lance L. Range, Project Manager, Office of Site Evaluation, Illinois Environmental Protection Agency


Signature

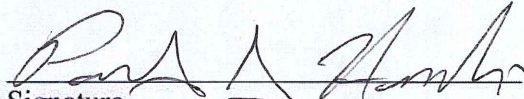
3/7/2012
Date

Reviewer: Tom Crause, Office Manager, Office of Site Evaluation, Illinois Environmental Protection Agency


Signature

3/7/2012
Date

Approval: Pat Hamblin, United States Environmental Protection Agency, Region 5


Signature

7/3/12
Date

The approval signatures on this page indicate that this document has been authorized for information release to the public through appropriate channels. No other forms or signatures are required to document this information release.

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1.0 SITE BACKGROUND

1.1 Site Introduction

On September 23, 2009, the Illinois Environmental Protection Agency (Illinois EPA) Office of Site Evaluation (OSE) was tasked by the United States Environmental Protection Agency (U.S.EPA) Region V to conduct a Preliminary Assessment (PA) at the Essex Wire - Rockford (a.k.a., Rockford Ordinance Site) site in Rockford, Winnebago County, Illinois. The site is located at 2816 North Main Street, Rockford, Illinois. The PA is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300) requires that a Preliminary Assessment be performed on all sites entered into the Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS), U.S. EPA's inventory of hazardous waste sites.

A Preliminary Assessment is the initial step in the Superfund process that utilizes a limited-scope investigation and collects readily available information. The Preliminary Assessment distinguishes between sites that pose little or no threat to human health and the environment and those that require further investigation. The Preliminary Assessment also supports emergency response and removal activities, fulfills public information needs, and generally furnishes appropriate information about the site early in the assessment process.

If the findings of the Preliminary Assessment determine that further investigation is necessary, the site will continue to progress through the Superfund process and receive a Site Inspection. A Site Inspection will evaluate the extent that a site presents a threat to human health and/or the environment. This may be accomplished by collecting and analyzing wastes and environmental media samples to determine whether hazardous substances are present at the site and are migrating to the surrounding environment. The Site Inspection will provide necessary information that will determine if the site qualifies for possible inclusion on the National Priorities List (NPL) or should have No Further Remedial Action Planned (NFRAP). At any time throughout the Superfund evaluation process, the site may be NFRAP, be referred to

another state or federal clean-up program, or recommended for further action. The Preliminary Assessment is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

The Essex Wire consists of approximately 14.01 acres with 12 buildings that are connected. The buildings have over 380,000 square feet of floor space. There is also a modern two-story administration building. This site was referred to OSE by the Illinois EPA's Federal Facilities Unit in regards to the site being utilized as a Department of Defense Ordinance facility and by the Essex Group Inc. Company. Production processes at the site included the manufacture and storage of shell casings, wire and wire related products.

2.0 SITE BACKGROUND

2.1 Site Description

The Essex Wire - Rockford site is located at 2816 North Main Street in Rockford, Illinois in Winnebago County and was built in 1939. The site is specifically located at Township 44 North, Range 1 East, on the east side of Section 11. The site is flat and well drained and is supplied with city water and sewer. The site has a frontage on the west side of North Main Street of 700 feet, a depth on its north lot line of 540.73 feet, a depth on its south lot line of 1203.61 feet, and a rear westerly diagonal frontage on the Chicago, Milwaukee, St. Paul & Pacific Railroad of 967.53 feet. The site is currently fenced.

There are two sources of water supplying the facility. The City of Rockford supplies water by a 12" water line for the fire emergency sprinkler system. The water for normal usage comes from a deep well located in the boiler room. During the Department of Defense operations, the normal usage well was pumped at the rate of 400 gallons per minute.

Operations over the years have included the manufacture of ammunition shell casings, wire and product storage. It is probable that chlorinated solvents were used in the production of the shell casings to clean machines, machine parts and floors. At the present time, the site is being utilized as a semi-truck driver training area, equipment storage for Ingersoll Manufacturing, and equipment storage/truck storage for a landscaping company.

Operations and facilities surrounding the site include the Rockford Country Club golf course and residential homes to the east. To the west is the Chicago, Milwaukee, St. Paul & Pacific Railroad and beyond the tracks are residential homes. To the north of the site are commercial and residential areas. To the south are commercial properties (a vacant grocery store) along with two schools (Head Start North and Spectrum School). There is a residential neighborhood just to the west of the facility. Residential homes are located approximately 140 feet from the facility.

The City of Rockford obtains drinking water from 32 municipal wells. There are 62 community supply wells located within four miles of the facility according to the Illinois EPA's Surface Water Assessment Program Assessment Tool. Four wells are located within one mile of the site. One well is located to the north of the site (0.64 mile), another well is located to the southwest of the site (0.50 mile), and two wells are located to the southeast of the site (1 mile). At the time of this investigation, neither well has been impacted.

2.2 Site History

The buildings were constructed in 1939 as part of the Rockford Ordnance Plant that manufactured 155 mm shell casings. The facility operated from 1948 to 1956 and subsequently vacant until 1959 when the site was offered for government sale. The sealed bid opening on this property was not successful. After ongoing procedures to find an owner, Essex Group Corporation proposed an offer on June 15, 1960. United Technologies Corporation is the parent company of the Essex Group Corporation. Essex utilized the site for wire manufacture and storage. Essex closed the Rockford facility in 2003. Essex Group sold the property to Hendricks Development Group, but the exact date of purchase is unknown at this time.

Essex was responsible for copper and aluminum wire drawing and coating. Two major operations were conducted at the plant. The first was the reduction of the diameter of both the aluminum and copper wire. In this process, synthetic oil for the copper and natural oil for the aluminum was both used as a lubricating agent and as a coolant. The second operation involved coating the wire several times with enamel. These wires were coated and baked with one of a number of nylon or polyester enamel coatings.

A Resource Conservation and Recovery Act (RCRA) closure certification inspection was

conducted at Essex on July 13, 1989 by Illinois EPA. In conjunction with this inspection, a more thorough inspection was conducted based on a complaint that had been received.

The complaint centered around an underground storage tank that supposedly held hazardous waste and which was located on the northwest side of the property. In addition, the complaint alleged that dumping of enamel waste had occurred on the west side of the plant near a set of railroad tracks. It was discovered upon inspection that two 20,000-gallon underground storage tanks did contain a spent dip solution. There exists an area to the east of the mentioned tanks where oil from a compressor has been released outside of the facility and has penetrated into the soil next to the building. A third area existed near the west side of the facility near a set of railroad tracks. It appeared that waste had been spilled or dumped in this area. There was a second complaint implicating additional underground storage tanks, and a third complaint suggesting the improper disposal of enamel paints, solvents, etc. which were dumped on the ground west of the main building near a metal shed outbuilding for a number of years.

A RCRA inspection was conducted at the site on December 12, 1990. Four waste streams were generated during the manufacture of the insulated wire: 1) drawing fluid (coolant and lubricant) for copper wire which was composed of oil diluted with water, 2) drawing fluid for aluminum wire, which was oil alone (no water added), 3) liquid enamel waste that was collected during changeovers and mixes, and 4) solid enamel waste which was collected on filters, rags and mop heads. The enamel wastes, solid and liquid, contain phenol, xylene and cresylic acid. Methanol migrated into the waste stream by way of a hand and tool cleaner. The two enamel waste streams were disposed of by incineration.

The waste drawing fluids for the copper and aluminum wire were disposed of in different ways. The aluminum drawing fluid contained no water. The oil portion could not be separated from the aluminum fines because of their similar densities. Rineco Chemical Industries in Benton, Arkansas incinerated it for its high BTU value.

The copper fines (copper mud) settled out of the copper drawing fluid and were reclaimed by a company in Montana. The oil and water mixture was pumped into a storage tank and then into barrels where it was stored until it could be put into an evaporator. The evaporator exhaust was permitted by Air Pollution Control (APC), Pin Number (PN) 78020056. The sludge that remained after evaporating was nonhazardous by Extraction Procedure (E.P.) Toxicity and

was shipped under manifest to Heritage in Lemont, Illinois. In addition to the copper drawing fluid, the evaporator received three other waste streams: 1) mop water from spills in the drawing mill, 2) drawing fluid mixed with water from a leaking deionized water tank, which was pumped out of the basement and 3) compressor blow-down. In the past, the copper and aluminum waste drawing fluids had been combined.

On September 10, 1991 a spill occurred at the Essex site involving heating oil. An unknown amount of heating oil was released during the filling of an underground storage tank. The Illinois Emergency Services and Disaster Agency (IESDA) were contacted and an incident number was assigned (912562).

The IESDA Incident report refers to overfill and leaky fill lines at four 20,000-gallon underground storage tanks. The product contained in the tanks was #5 fuel oil, which was used to feed Kewanee Boilers. The tanks themselves showed no indication of leaks. These tanks were in service until 1990 and were registered with the State Fire Marshal. Upon removal (approximately in September 1991), the soil test results confirmed that contamination was not present, and the tank holes were backfilled (45-Day Report, October 1, 1991).

During the removal, five other tanks were removed; one 1,000-gallon gasoline tank, two 20,000 gallon #5 fuel oil tanks, and two quench oil tanks. These tanks were not in service before 1974, and were not registered. These tanks showed no indication of leaks at the tanks. These five tanks were considered closed. During the removal of the tanks, product was observed in the man ways. The product was #5 fuel oil, which is inherently thick, whereby it remains generally in the area from which it accumulates. Upon excavation, an alternate filling system other than the man ways directly above the tanks was observed to be leaky. The fill system went into the south side of the building. The product lines went along a crawl way to the west side of the building. The alternate fill lines were heavily contaminated. An unknown amount of contaminated soil was removed. The contaminated soil did not appear to extend past the bottom of the tank. The contaminated soil was removed from the site by truck. A No Further Remediation letter was issued by the Illinois EPA's Site Remediation Program for the tanks on June 10, 1996.

There was a tank removal conducted in 1989 by Heritage Remediation. This removal consisted of cleaning, degassing, removal and disposal of two 20,000 gallon tanks containing

copper mud, and one 800 gallon gasoline underground storage tank. Analysis of samples collected during this event for volatile and semi-volatile organic and selected metals analysis did not exhibit significant concentrations of contaminants above 0.025 ppm for benzene or 16.025 ppm for benzene, ethylbenzene, toluene and xylene (BTEX).

In response to unknown contamination surrounding the leaking underground storage tanks, a Soil Boring Report was conducted at the Essex site in August of 1993 by Environmental Contractors of Illinois (Aug 1993). Six soil borings were drilled to determine the extent of contamination in the area surrounding the four 20,000 gallon underground storage tanks that were removed in 1991. Groundwater was encountered at approximately 27 feet. The borings were completed between 25 and 32 feet. Soil contamination was not evident by either sight or smell. Soil samples were collected at depths of 18-20 feet and 23-27 feet in each borehole. The samples were only analyzed for PNAs. Low concentrations were detected in 4 of the 6 borings (0.011 ppm for benzo(b)fluoranthene (2B1), 0.097 ppm for indeno (1,2,3-c,d)pyrene and 0.087 ppm for benzo(g,h,i)perylene (3B2), 0.118 ppm for benzo(g,h,i)perylene, 0.016 ppm for benzo(a)pyrene (6B3) and 0.086 ppm for benzo(k)fluoranthene (8B4)) (Soil Boring Report by Environmental Contractors of Illinois, August 1993).

The area surrounding the site consists of mixed residential/commercial/industrial properties. Adjoining properties include a grocery store, residences, and a railroad right of way.

2.3 Regulatory Status

Based upon available file information, the Essex Wire - Rockford Site does appear to be subject to Resource Conservation and Recovery Act (RCRA) corrective action authorities. The site is listed in the Resource Conservation and Recovery Information System as a small quantity generator. As of May 2003, the plant is said to be in compliance.

Information currently available does not indicate that the site is under the authority of the Atomic Energy Act (AEA) or the Uranium Mine Tailings Action (UMTRCA).

The U.S. EPA/Office of Prevention, Pesticides and Toxic Substances maintains the Federal Insecticide Fungicide or Rodenticide Act (FIFRA) database. The subject facility is currently listed as a FIFRA site. The violation was "PCB - Failure to Maintain Records" and "PCB - Use".

3.0 FIELD INVESTIGATION ACTIVITIES

3.1 Site Reconnaissance

A site visit was conducted at the Essex Wire - Rockford Site facility on October 19, 2010. Upon arrival at the site, Illinois EPA staff were greeted by the maintenance supervisor and the environmental consultant and given a tour of the building. During this tour, the past areas of suspect contamination were visited. The interior of the buildings appear to be in good shape without any signs of water damage. A majority of the interior floors are constructed of wooden blocks. These blocks could have the potential to have absorbed past contaminants. At the former chip house, located on the north side of the building, on the interior there is a large pipe which extends from the wall. There is a discharge of some type of waste from the area where the pipe enters into the building. Past environmental investigations have identified this as a type of heavy oil. No signs of contamination were present at the soil surface surrounding the building. The staff of the Illinois EPA left the site at approximately 1 p.m.

3.2 Analytical Data

No analytical data have been collected by OSE during the CERCLA Preliminary Assessment activity.

3.3 Past Environmental Investigations

Fishe Enterprises Inc. drilled a total of six soil borings on August 18, 1991. The borings were conducted to determine the extent of contamination in the area surrounding four 20,000-gallon USTs containing #5 fuel oil that were removed October 16-24, 1991.

The six borings were drilled around the perimeter of the excavations to determine the horizontal extent of the contamination. Soil contamination was not evident by sight or smell in any of the boreholes.

Soil samples were collected at depths of 18-20 feet and 23-25 feet in each of the boreholes. A sample was collected from the 25-27 foot range from another boring. The soil samples were field analyzed with a photoionization detector (PID). Elevated PID readings were not detected. Eleven soil samples were collected and taken to a laboratory for analysis of Poly Nuclear Aromatics (PNAs). BTEX was not analyzed for based on low levels of these compounds detected from the samples collected from the excavation on December 3, 1991. Low concentrations of PNAs were detected in four of the six borings. (0.011 ppm for benzo(b)fluoranthene (2B1), 0.097 ppm for indeno (1,2,3-c,d)pyrene and 0.087 ppm for benzo(g,h,i)perylene (3B2), 0.118 ppm for benzo(g,h,i)perylene, 0.016 ppm for benzo(a)pyrene (6B3) and 0.086 ppm for benzo(k)fluoranthene (8B4)) (Soil Boring Report by Environmental Contractors of Illinois, August 1993).

The Soil Boring Report by Environmental Contractors of Illinois for Essex Group Inc., which is dated August 1993 describes that the Illinois EPA cleanup objectives have not been met. In a Illinois EPA memorandum dated March 22, 1996, a review of the cleanup objectives was conducted by Illinois EPA and the recommendation was given to allow the wastes to remain in place but that the facility must continue to meet the requirements of 35 Ill. Adm. Code Subtitle G, Part 722; Standards Applicable to Generators of Hazardous Waste.

A No Further Remediation (NFR) letter was issued by the Illinois EPA's Site Remediation Program on June 10, 1996 in relation to the underground storage tanks.

According to the Facility Registry System on the U.S.EPA website, an enforcement action was filed against the owners of the site in 1997. Air inspections were conducted and documented in 2002 and 2003.

A Federal Facilities Preliminary Assessment was completed on June 30, 2005 by Plexus Scientific for the U.S. Army Corp of Engineers. This Preliminary Assessment determined that there were possible contaminants which could include solvents and oils. A Phase I Assessment was conducted in June 2007. This Phase I Assessment determined that there were several recognized environmental conditions associated with the subject property. Additional investigation of these issues was recommended to further document soil and groundwater conditions.

In July 2007, a Phase II assessment was conducted at the subject property. This site

investigation consisted of twenty-one soil borings located throughout the property and the installation of three temporary groundwater monitoring wells. Borings were placed near areas of former Underground Storage Tanks (USTs), the flammable storage building, near the chip house, and along the south wall of the building. Monitoring wells were placed near the northwest corner of the building, near the east-central border of the property, and near the southeast corner of the property. Borings were completed to varying depths dependent upon site conditions. Wells were set at approximately 34 feet below grade.

Soil samples collected during the Phase II assessment (MW-1, 20-24'; B-8, 0-4'; B-9, 4-8'; B-10, 4-8'; B-16, 8-12'; B-20, 0-4'; and MW-2, 24-28') were submitted to a laboratory for analysis of Base, Neutrals and Acids (BNAs), volatile organic compounds (VOCs), priority pollutant metals, and pH. Benzo(a)pyrene was detected at 0.102 ppm, above the most stringent cleanup objective (0.09 ppm) according to the IEPA's Tiered Approach to Corrective Action Objectives, in B-9, 4-8'. Benzo(a)pyrene was not detected above PNA Background Within Metropolitan Statistical Areas (2.1 ppm). Winnebago County, the location of the subject property, is considered a Metropolitan Statistical Area. Benzo(a)pyrene, Benzo(b)fluoranthene, dibenzo(a,h)anthracene, were detected in B-20, 0-4', at levels slightly above the most stringent cleanup objectives, but were below the background levels established for metropolitan statistical areas. Visual contamination was present in the sample collected from B-16, 8-12'.

Groundwater was encountered at approximately 27 feet below grade in each of the three wells. Groundwater samples were submitted to a laboratory for analysis of Base, Neutrals and Acids (BNAs), volatile organic compounds (VOCs), priority pollutant metals, and pH. Lead was found at 0.012-0.014 ppm; but these values do not constitute an observed release.

The Phase II identified two areas of soil contamination: near the paint room on the south side of the building and on the west side of the property. Visual contamination was present in the soil near the chip house, but unverified as contaminated due to dilution of the sample during analysis at the laboratory.

4.0 POTENTIAL SOURCES

Section 4.1 Contaminated Soil

Potential sources include contaminated soils. Visual contamination is present in the soil near the chip house located on the northern portion of the building. Soil sample B-16 which was collected from a depth of 8-12" revealed elevated levels of semi-volatile compounds. This sample was collected in the area of the former chip house. Other samples were collected from the area but were not analyzed for semi-volatiles. Low levels of PNAs were detected in onsite soils. Benzo(a)pyrene was discovered from sample B-9 (4-8") which is located on the southern side of the building near the former paint room (0.102 ppm). Benzo(a)pyrene and other various PNAs were detected in sample B-20 (0-4") which is located on western portion of the property between the former hot forge shop and the warehouse portions of the buildings near the former areas of the quench oil tanks and former underground storage tanks at levels slightly above the most stringent cleanup objectives, but were below the background levels established for metropolitan statistical areas.

Contaminants in the soil have the potential to impact future workers on the site and any other on-site individuals. Contaminants in the soil have the potential to leach into the underlying groundwater.

Due to the size of the site and the small number of samples collected from the area it is difficult to determine the extent of the contamination in the area.

Section 4.2 Groundwater Contamination

Groundwater samples were submitted to a laboratory for analysis of Base, Neutrals and Acids (BNAs), volatile organic compounds (VOCs), priority pollutant metals, and pH. Lead was discovered in the groundwater. It is unclear at the moment of the extent of the contamination in the soils and groundwater. Lead contamination was found in all three monitoring wells. These monitoring wells are located on the northern, eastern and southeastern portions of the property. The area located between these three monitoring wells is approximately 85,269 square feet.

The geology of Winnebago County is characterized by unconsolidated Quaternary material unconformably underlain by a 2500-foot section of Paleozoic sedimentary rock. The Quaternary deposits are composed of glaciofluvial sand and gravel, lacustrine silt and clay, eolian silt (loess), and till. The Paleozoic sedimentary rocks of the Cambrian and Ordovician age are interblended deposits of sandstone, shale and dolomite. The bedrock surface is

unconformable with the Quaternary deposits because of erosion that formed the deeply incised and well developed pre-glacial Rock Bedrock Valley, which trends north-south through Winnebago County. The surface layer is black sandy loam and dark brown sandy loam. The upper subsoil is brown gravelly loamy sand and gravelly sand. The substratum is brown and yellowish brown gravelly sand and sand. In some areas, the gravel is absent. Permeability is moderately rapid in the subsoil and very rapid in the substratum.

Groundwater in the Rockford area is derived primarily from three different, though in many areas hydraulically connected, geologic units. These aquifers are in the Pleistocene glacial drift, comprised predominately of outwash sands and gravels in the Rock Bedrock Valley, in the Ordovician dolomites, the “shallow” bedrock encountered in the uplands overlooking the river valley and the Cambrian Sandstones, encountered beneath the dolomite in the uplands but comprising the bedrock surface beneath most of the outwash deposits in the deeper portions of the Rock Bedrock Valley. Groundwater from these three formations provides 100 percent of the supply for public, industrial, and domestic use in Winnebago County. Rockford Water Division is supplied by groundwater pumped from 32 wells located throughout the City of Rockford. The original wells in Rockford are pumped from the sand and gravel aquifer underlying the Rock River Valley. The shallow wells are typically 220-250 feet deep. Modern wells, up to 1,500 feet deep, take water from a porous sandstone aquifer. There are currently 30 deep wells in the system. In general, groundwater flow is towards the Rock River.

5.0 PATHWAY DISCUSSIONS

CERCLA identifies three migration pathways and one exposure pathway, as identified in its Hazard Ranking System, by which hazardous substances may pose a threat to humans and/or the environment. Consequently, sites are evaluated on their known or potential impact to these pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

5.1 Groundwater Pathway

The source of Rockford’s drinking water comes from a blend of 32 deep and shallow

groundwater wells. There have been three groundwater samples collected from the Essex Wire property. Groundwater samples collected from the three monitoring wells located onsite revealed elevated levels of lead in the groundwater. The area located between these three monitoring wells is approximately 85,269 square feet.

The City of Rockford obtains drinking water from 32 municipal wells. There are 62 community supply wells located within four miles of the facility according to the Illinois EPA's Surface Water Assessment Program Assessment Tool. Four wells are located within one mile of the site. One well is located to the north of the site (0.64 mile), another well is located to the southwest of the site (0.50 mile), and two wells are located to the southeast of the site (1 mile). At the time of this investigation, neither well has been impacted.

The following table indicated the population surrounding the Site:

Distance from Site (miles)	Population	Weighted
0-1/4	774	522
1/4-1/2	3369	3233
1/2-1	12662	5224
1-2	30450	9385
2-3	47327	6778
3-4	49417	4171

5.2 Surface Water Pathway

No surface water samples were collected during this investigation. Most of the land area is under roof or covered by asphalt. Surface water runoff is directed to the storm water management system, which eventually flows to the Rock River. There are no known surface water intakes along the Rock River. The Rock River is considered a fishery. There are wetlands located along the Rock River, but it does not appear that these wetlands meet the definition of 40 CFR 230.3.

5.3 Soil Exposure

Operations and facilities surrounding the site include the Rockford Country Club golf course and residential homes to the east. To the west is the Chicago, Milwaukee, St. Paul & Pacific Railroad and beyond the tracks are residential homes. To the north of the site are commercial and residential areas. To the south are commercial properties (a vacant grocery store) along with two schools (Head Start North and Spectrum School). There is a residential neighborhood just to the west of the facility. Residential homes are located approximately 140 feet from the facility. At this time there are three businesses operating within the fenced area of the facility, although the total number of onsite workers is unknown, it can be assumed that it is over 1 and under 100.

Several soil samples collected during the Phase II Assessment were found to contain low levels of PNA compounds. Benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene were found in low concentrations. Visual contamination was present in a sample collected near the chip house (north side of building) (B-20, 8-12"). However, due to interference from the heavy oil present in the sample, the laboratory was required to dilute the sample. Several semi-volatiles were detected at low concentrations, but none over 3 times background.

Complaints concerning past dumping actions of waste were documented in the Illinois EPA BOL files, along with the documentation that #5 fuel oil was left underground. These sample results as well as the complaints and documentations should be further evaluated to determine the impact on the soil exposure pathway.

5.4 Air Route

No air samples were collected at this time. But there are emission stacks and information which suggests that pollutants were discharged over the years of operation including VOCs, carbon monoxide, sulfur dioxide, nitrogen dioxide, and a small amount of particulates.

6.0 SUMMARY

The purpose of this investigation was to determine if the Essex Wire - Rockford site warrants further evaluation by the CERCLA Site Assessment program. This Preliminary Assessment is the initial step in the Superfund process that utilizes a limited-scope investigation and collects readily available information. The Preliminary Assessment distinguishes between sites that pose little or no threat to human health and the environment and those that require further investigation.

The Essex Wire site was selected to be investigated due to the past activities which have occurred at the site. This site was a former Department of Defense facility that manufactured shell casings. The site was then utilized as a wire manufacturing facility. These activities have the potential to release potentially harmful chemicals into the environment. Although some remediation activities have occurred on the site, the potential exists that contamination is still present.

Contaminated soil is a concern at the property due to the visual contamination present and the elevated levels of PNAs, but these levels were not in excess of three times background. Contaminated soil has the potential to affect on-site workers and the possibility of contaminating groundwater by leaching.

The City of Rockford obtains drinking water from 32 municipal wells. There are 62 community supply wells located within four miles of the facility according to the Illinois EPA's Surface Water Assessment Program Assessment Tool. Four wells are located within one mile of the site. One well is located to the north of the site (0.64 mile), another well is located to the southwest of the site (0.50 mile), and two wells are located to the southeast of the site (1 mile). At the time of this investigation, neither well has been impacted. Groundwater collected from the monitoring wells on-site revealed elevated levels of lead. Lead in the groundwater was found to be above the maximum contaminant level (MCL) for drinking water, but not above three times background.

Surface water runoff is directed to the storm water management system, which eventually flows to the Rock River. At this time, the surface water pathway does not appear to be impacted.

Former wastes generated and used at the site could possibly include solvents and metals. Solvents were used at many industrial facilities to clean machines and parts. Due to the time

period the plant was operating and the length of time the site has been used for manufacture of shell casings and wire, it is possible that contamination has occurred.

|

7.0 REFERENCES

Illinois Environmental Protection Agency, Bureau of Land files, LPC 2010300060 Essex Group.

Source Water Assessment Program. <http://kleene.er.usgs.gov/arcims/swap/index.htm>

Environmental Contractors of Illinois, Inc. Limited Phase II Soil Boring and Groundwater Investigation, Essex Wire, 2816 N. Main Street, Rockford, Illinois. July 5, 2007.

Environmental Contractors of Illinois, Inc. Phase I Environmental Site Assessment, Essex Wire, 2816 N. Main Street, Rockford, Illinois. March 5, 2007.

Plexus Scientific Corporation. Preliminary Assessment, Former Rockford Ordnance Plant, Rockford, Winnebago County, Illinois. June 2005.

Environmental Contractors of Illinois, Inc. Soil Boring Report, Essex Group Inc. 2816 North Main Street, Rockford, Illinois, 61103. August 1993.

Figure 1
Site Location Map

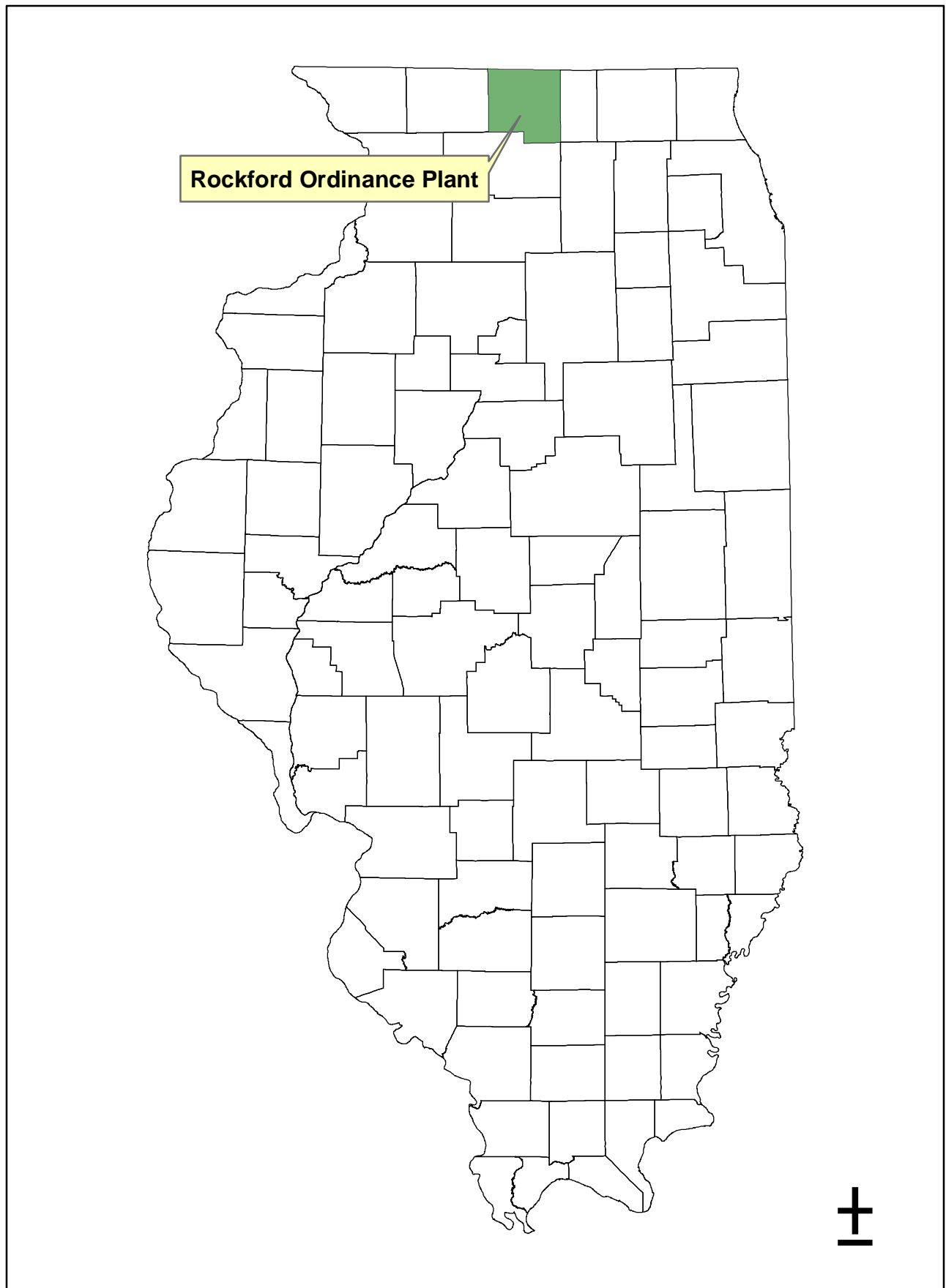


Figure 2: Site Area Map

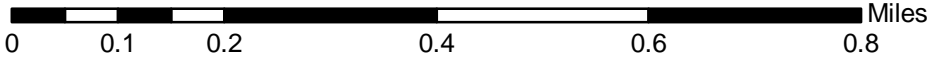
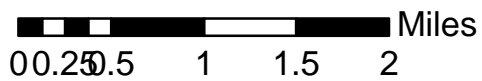
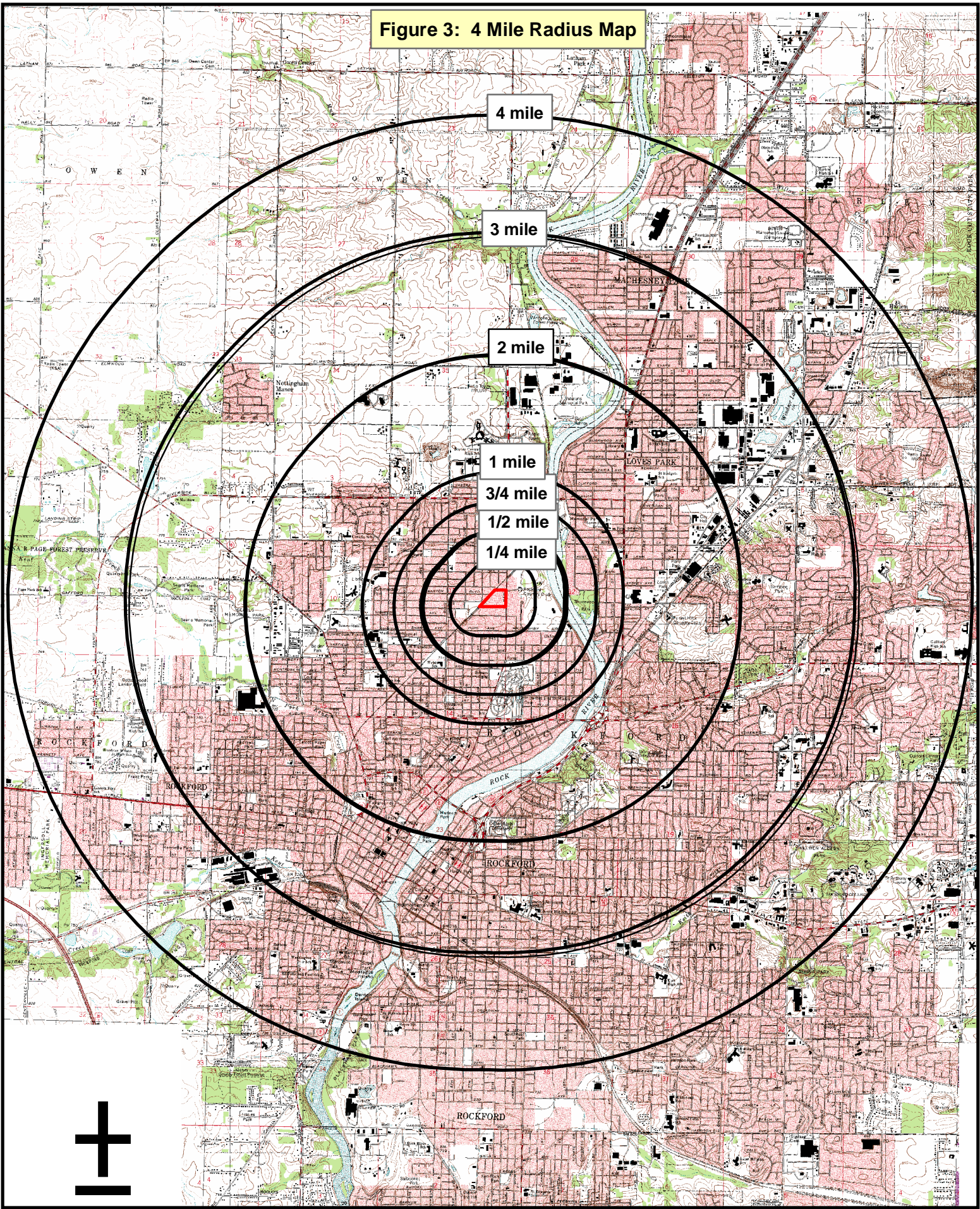
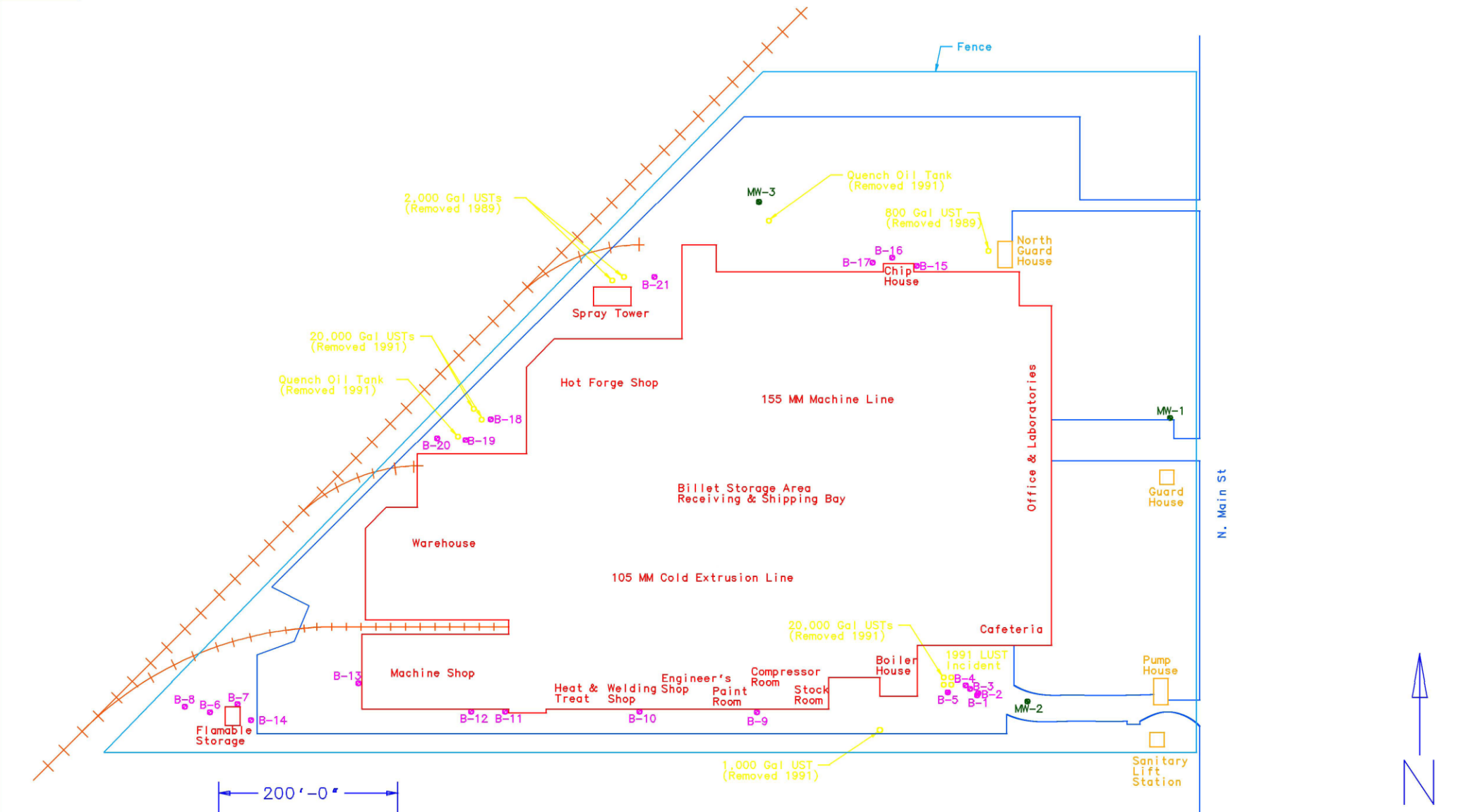


Figure 3: 4 Mile Radius Map





200'-0"
Scale

6/4/07	ORIGINAL	JLC	
DATE	CHANGE RECORD	BY	APPVD



Anderson & Egan, Co.
124 N. Water Street
Suite 206
Rockford, IL 61107

Sample Location Map Essex Wire 2816 N. Main Street Rockford, IL		
DWG SIZE A	Job # 103.105	